Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

**Flame Test Lab Report Requirements**

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| --- | --- | --- |
| Section | Components | Points |
| Cover page | * Informative title (clearly explains purpose of investigation) * Date * Subject * Group members * Optional: relevant picture | \_\_\_/5 |
| Introduction | * Provides an overview of the theory behind flame tests   + Include background information that will help reader understand key points of investigation * Explain purpose of investigation * Explain safety risks of experiment and how you minimized them | \_\_\_/10 |
| Materials | * List of materials with specific quantities when possible | \_\_\_/5 |
| Procedure | * Step-by-step explanation of experimental procedure * Past tense * 3rd person * Clear and concise | \_\_\_/5 |
| Data | * Observed flame colors for known and unknown substances * Electron configurations for known substances (full and abbreviated) * Proposed identities of unknown substances | \_\_\_/25 |
| Analysis/ Discussion | * Accurately and concisely summarize data, describe any trends or patterns (or lack thereof) * Discuss relationship between results and background information on which hypothesis was based * Explain your sources of error and how to correct them * Include improvements for future experiments | \_\_\_/20 |
| Conclusion | * A brief statement of the conclusion you have drawn from the experiment * Clearly and accurately connect investigation to a real-world example | \_\_\_/10 |
| Reflection | * Includes thoughts on the success of tasks, any problems encountered, and how you overcame them | \_\_\_/5 |
| Works cited | * List of all sources referred to in the report (at least 3 sources) | \_\_\_/5 |
| Formatting | * Entire document is MLA formatted | \_\_\_/5 |
| Grammar, punctuation, spelling | * Written in past tense * Grammar, punctuation, and spelling is correct * Subscripts/superscripts used properly (CO2, not CO2) | \_\_\_/5 |
| Overall Score: | | |